# **Editorials**

#### Whatever Happened to Report MM?

AT ITS MEETING in June 1986 the House of Delegates of the American Medical Association (AMA) adopted Report MM of the Board of Trustees, entitled "Proposal for Financing Health Care of the Elderly." This report was developed as a result of careful study by the AMA Councils on Medical Service and Legislation. It did not purport to be the final word but was rather presented as a springboard for wider discussion. But, to this writer's knowledge, there has so far been little, if any, wider discussion.

It is to be hoped that this thoughtful and far-sighted proposal is not destined simply to gather dust on some shelf where no one is likely to be either stimulated or disturbed by it. The financing of health care for the elderly is already in serious jeopardy for the long term. The problem is not likely to go away. Rather it will soon be upon us, since the number and proportion of elderly persons in our society increases substantially every year. But reports and studies such as this proposal are not likely to become widely known or widely discussed without some affirmative promotion, or even some aggressive marketing, by its sponsors. It is the way of good and important reports to become ignored unless someone does something to counteract the inertia with which any proposals for fundamental change are always met. The weight of this very real inertia tends either to push a novel idea aside or, more often, to bury it.

Report MM of the June 1986 House of Delegates is an important insight into what needs to be done about financing health care for the elderly. It should not be shelved or buried. It should be given aggressive exposure by its sponsors, the physicians of the nation, who are concerned and informed about health care of the elderly, and that it be financed appropriately.

MSMW

### The Surgeon's Approach to Hypoglycemia in Infants and Children

In this issue, Moossa and co-workers review hypoglycemic syndromes in infancy and childhood and present a surgeon's perspective on the treatment. In addition, they draw upon experience over a 13-year period with five infants treated with 90% pancreatectomy, although no details of these patients are presented. Correctly, they indicate that hypoglycemia in children is generally transient and usually responds to relatively simple dietary and pharmacologic measures. Persistent severe hypoglycemia is not common, but presents a dramatic and potentially lethal threat to children with this syndrome. Most centers with an interest in metabolic diseases of infants and children continue to report an alarmingly high percentage of treatment failures and long-term neurologic sequelae. Management of hypoglycemia in the first two weeks of life is directed towards the maintenance of normal serum glucose levels. Hypoglycemia that is persistent but mild and easily controlled may be seen in a variety of metabolic and endocrine disorders such as hypothyroidism and hypopituitarism. When hypoglycemia is severe and persistent beyond the first two weeks of life, an inborn error of metabolism or hyperinsulinism is usually the cause. An inborn error of metabolism is unlikely in the absence of hepatomegaly and can usually be excluded if the serum pH, lactic acid and ammonia levels are within normal limits and the urine is negative for ketones, amino acids and reducing substances.2 It should be emphasized that in

children, and particularly in neonates, with hyperinsulinism the serum insulin levels are rarely very high. If the serum insulin level is  $5 \mu U$  per ml or more during hypoglycemia, the diagnosis of hyperinsulinemia should be strongly considered. Hyperinsulinism, which is the most common cause of persistent neonatal hypoglycemia,2 is diagnosed if an inappropriately high insulin level is found during a period of hypoglycemia. A thorough evaluation frequently produces confusing and equivocal data and unfortunately results in a protracted period of nonoperative management.3.4 An insulin to glucose ratio greater than 1:2-obtained by placing the insulin value expressed in microunits per milliliter of serum over the glucose level in milligrams per deciliters—during a period of hypoglycemia is a most valuable laboratory discriminant when deciding whether surgical intervention is warranted.5 Although most investigators have concluded that early surgical intervention for hyperinsulinism is appropriate, the documentation of this disorder may be exceedingly difficult in some patients.

Hyperinsulinism may result from discrete islet cell adenomas or the diffuse pancreatic lesions of microadenomatosis, islet cell hyperplasia or nesidioblastosis. In nesidioblastosis, islet cells are found within the ductal epithelium and are believed to represent a persistence of fetal histology. 6-9 The unresponsiveness of fetal  $\beta$ -cells to changes in serum glucose levels in the absence of local secretory regulation found in normal islet cells results in the excess insulin secretion seen in nesidioblastosis.8-11 Results in these patients support the observation that surgical treatment is more effective for localized disease than for diffuse islet cell abnormalities.12 Adenomatous disease may only represent another morphologic variation of the single fundamental lesion. Furthermore, there are no clinical or laboratory discriminates of significant accuracy to establish a pathologic diagnosis that might alter either the decision to operate or the limits of resection. Regardless of the pathologic diagnosis, the decision must be to control the glucose level with drug or surgical therapy—in small babies, the sooner the better.

These clinical and pathologic considerations support a unified surgical approach to hyperinsulinism. All children with documented hyperinsulinism are candidates for an immediate operation, regardless of the anticipated islet cell abnormalities. Furthermore, the low mortality and morbidity of an operation justify doing it immediately in hyperinsulinemic patients and also in those patients who are too unstable to withstand a protracted evaluation. The authors indicate that visceral angiography, ultrasonography and computed tomography have not been helpful and should not be routinely applied. I concur.

The frequency with which persistent postoperative hypoglycemia is observed in patients with diffuse pancreatic disease demands that surgical therapy be appropriately extensive at the initial procedure. Total pancreatectomy is rarely indicated and should not be done at the initial procedure. Although the technique of total pancreatectomy for hypoglycemia emphasizes leaving tissue on the duodenum, in patients who require this procedure, permanent exocrine and endocrine insufficiencies will usually develop.<sup>12</sup>

The recommendation that the first surgical procedure should consist of a 90% pancreatectomy, consisting of removing all of the pancreas distal to the right side of the superior mesenteric artery, the uncinate process and most of the pancreatic head and

leaving approximately a third of the pancreatic head attached to the duodenum, is attracting more proponents.<sup>2,4,13</sup>

If in the early postoperative period hypoglycemia continues, the patient should be returned to the operating room for a total pancreatectomy without duodenectomy.<sup>4,12</sup>

The authors have correctly emphasized the importance of the spleen, and have stated the dictum that it should be preserved when at all possible.<sup>14</sup>

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#### REFERENCES

- 1. Thomas CG Jr, Underwood LE, Carney CN, et al: Neonatal and infantile hypoglycemia due to insulin excess: New aspects of diagnosis and surgical management. Ann Surg 1977; 185:505-517
- 2. Schiller M, Krausz M, Meyer S, et al: Neonatal hyperinsulinism—Surgical and pathologic considerations. J Pediatr Surg 1980; 15:16-20
- 3. Finegold DN, Stanley CA, Baker L: Glycemic response to glucagon during fasting hypoglycemia: An aid in the diagnosis of hyperinsulinism. J Pediatr 1980; 96:257-259
- Campbell JR, Rivers SP, Harrison MW, et al: Treatment of hypoglycemia in infants and children—Surgical considerations. Am J Surg 1983; 146:21-28
- 5. Castro A, Buist NRM: The insulin-glucose ratio in children with islet cell tumors of the pancreas. Clin Biochem 1974; 7:81-87
- 6. Knight J, Garvin PJ, Davis RK, et al: Nesidioblastosis in children. Arch Surg 1980; 115:880-882
- 7. Schwartz SS, Rich BH, Lucky AW, et al: Familial nesidioblastosis: Severe neonatal hypoglycemia in two families. J Pediatr 1979; 95:44-53
- 8. Shermeta DW, Mendelsohn G, Haller JA Jr: Hyperinsulinemic hypoglycemia of the neonate associated with persistent fetal histology and function of the pancreas. Ann Surg 1980; 191:182-186
- 9. Yakovac WC, Baker L, Hummeler K: Beta cell nesidioblastosis in idiopathic hypoglycemia of infancy. J Pediatr 1971; 79:226-231
- 10. Hirsch HJ, Loo S, Evans N, et al: Hypoglycemia of infancy and nesidioblastosis. Studies with somatostatin. N Engl J Med 1977; 296:1323-1326
- 11. Grotting JC, Kassel S, Dehner LP: Nesidioblastosis and congenital neuroblastoma: A histologic and immunocytochemical study of a new complex neurocristopathy. Arch Pathol Lab Med 1979; 103:642-646
- 12. Harken AH, Filler RM, Avruskin TW, et al: The role of 'total' pancreatectomy in the treatment of unremitting hypoglycemia of infancy. J Pediatr Surg 1971; 6:284-289
- 13. Moazam F, Rodgers BM, Talbert JL, et al: Near-total pancreatectomy in persistent infantile hypoglycemia. Arch Surg 1982; 117:1151-1154
- 14. Eraklis AJ, Filler RM: Splenectomy in childhood: A review of 1,413 cases. J Pediatr Surg 1972; 7:382-388

## Primary Care—Does It Have a Future?

PRIMARY CARE is very much in the limelight these days. It is actively espoused by the family practice movement, and general internal medicine, pediatrics and obstetrics/gynecology are placing increasing emphasis on what is now being called primary care. The federal government has begun to shift some of its emphasis and support from training specialists and subspecialists to training for primary care. Primary care is seen as the entry point where a patient has first contact with the health care system and from whence he or she is referred to whatever specialists or subspecialists may be needed. It is also viewed as a place where ongoing care is easily coordinated and continuity of care can be achieved. Moreover, it is not lost on the payors for care that a primary care physician is in a strong position to decide upon the kind and amount of care that is given, and therefore what it will cost. Thus there is a growing effort to place a primary care physician in the position of "gatekeeper" with an incentive and responsibility to consider costs when deciding what should be done for a patient.

One might at first think that primary care and primary care physicians are something new, but they are not. Primary care has been there all the time and physicians have rendered it to their patients. But for many years the focus in medical education and medical practice has been on the training of specialists and sub-

specialists, and medical practice became, almost de facto, divided into specialties and subspecialties. Patients, physicians and patient care all tended to become compartmentalized. But in recent years there have been countervailing forces. Perhaps most important is a growing student interest in the broader and more human aspects of patient care that began more than a decade ago. Then there was coming to be a surfeit, if not a glut, of physicians with far too many specialists, and a perception that there were far too few generalists or primary care physicians. Too many patients were shopping around for their own specialists; many were seeing several specialists at once and, for better or worse, in effect prescribing their own treatment. Another important countervailing force has been the modern development of primary care and the role of the primary care physician. This has been notably assisted by a government that has been reducing its support of specialty and subspecialty training while increasing its support for the training of health professionals for primary care.

Besides being the entry point, and now being looked upon by some as the gatekeeper for patient care, the primary care movement has shown a special interest, not only in the more common ailments to which the flesh is heir, but also in the effect of illness upon a patient and the family, the effect of illness upon the interaction of a patient with his or her environment and the role of the family and others in helping to overcome the illness and its effects. Again this is not new, but the emphasis on it has been much greater than has been the case in the training and practice of many specialists and subspecialists. But is this enough, or is there more that primary care could be interested in? Is it enough to assure that primary care does indeed have a future as a discipline in medical education and patient care?

One senses that a genuine discipline is needed. But what might it be? Most of the science and technology in patient care is subsumed under one or another of the specialties or subspecialties. Research into health care delivery is being explored in terms of primary care, but somehow seems to miss the main focus of interest. Yet research, and good research, is needed to support an academic discipline and to secure it a respected position among scientific and technologic specialty peers in patient care. This will be essential if primary care, as it is coming to be known, is to have the future it could have, and probably deserves.

Primary care is above all an interaction between a doctor and a patient, and continuing care has to be a continuation of this interaction. To be sure, this interaction occurs between doctor and patient in all specialties, but too often in these specialties it may have second place to technological interventions. In primary care, however, the opposite may more likely be the case, and the human interaction may play the more important role with the technological interventions more subservient. There has been little scientific or quantitative study of this all-important topic. There is need objectively to address the phenomenon of the doctor-patient relationship, the skills that can be developed and used within it, the components of what has been called the art of medicine, and the need to relate these to patient and physician satisfaction, and to health care outcomes, particularly in primary care, where so much of the emphasis is on human interaction.

The pendulum seems to be swinging. There is a growing sense that modern medical science and its technology are not everything in patient care. While primary care is nothing new, a renewed emphasis on it, and what it is trying to do, could be the beginning of a new understanding of the phenomena involved in that very special interaction between doctor and patient that is, after all, the most essential ingredient in patient care.